

## DECISION

### ENVIRONMENTAL ASSESSMENT: MANAGING WATERFOWL DAMAGE IN THE COMMONWEALTH OF VIRGINIA

#### I. PURPOSE

The United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Wildlife Services (WS) program has prepared an Environmental Assessment (EA) to analyze the potential environmental and social impacts to the quality of the human environment from resolving damage, including conflicts and threats, to agricultural resources, property, natural resources, and human safety associated with waterfowl in Virginia (USDA 2010). The EA documents the need for waterfowl damage management in the Commonwealth and assesses potential impacts on the human environment of three alternatives to address that need. WS' proposed action in the EA would continue an integrated damage management program to fully address the need to manage damage and threats associated with waterfowl when requested in the Commonwealth.

Damage and threats of damage associated with the following waterfowl species were addressed in the EA: Canada geese (*Branta canadensis*), snow geese (*Chen caerulescens*), mallards (*Anas platyrhynchos*), mute swans (*Cygnus olor*), and domesticated waterfowl. Other species considered in the EA that may be addressed in limited numbers to resolve and prevent damage and threats in the Commonwealth include ruddy ducks (*Oxyura jamaicensis*), wood ducks (*Aix sponsa*), ring-necked ducks (*Aythya collaris*), American black ducks (*Anas rubripes*), redheads (*Aythya americana*), gadwalls (*Anas strepera*), green-winged teal (*Anas crecca*), blue-winged teal (*Anas discors*), American wigeons (*Anas americana*), Northern pintails (*Anas acuta*), Northern shovelers (*Anas clypeata*), canvasbacks (*Aythya valisineria*), greater scaup (*Aythya marila*), lesser scaup (*Aythya affinis*), common mergansers (*Mergus merganser*), red-breasted mergansers (*Mergus serrator*), hooded mergansers (*Lophodytes cucullatus*), American coots (*Fulica americana*), buffleheads (*Bucephala albeola*), Atlantic brant (*Branta bernicla*), common goldeneyes (*Bucephala clangula*), long-tailed ducks (*Clangula hyemalis*), tundra swans (*Cygnus columbianus*), Muscovy ducks (*Cairina moschata*), and pied-billed grebes (*Podilymbus podiceps*).

The EA was prepared by WS to determine if the proposed action or the other alternatives could have a significant impact on the quality of the human environment. Specifically, the EA was prepared to: 1) facilitate planning and interagency coordination, 2) streamline program management, 3) evaluate the potential environmental consequences of the alternatives related to the issues of managing damage caused by waterfowl, and 4) clearly communicate to the public the analysis of individual and cumulative impacts.

#### II. NEED FOR ACTION

The need for action arises from requests for assistance received by WS to reduce and prevent damage associated with waterfowl from occurring to four major categories: agricultural resources, natural resources, property, and threats to human safety. WS would only conduct waterfowl damage management activities after receiving a request for assistance. Before initiating waterfowl damage management activities in the Commonwealth, a Memorandum of Understanding, cooperative service agreement, or other comparable document would be signed between WS and the cooperating entity which lists all the methods the property owner or manager would allow to be used on property they own and/or manage. WS may also be requested to participate in disease surveillance and monitoring in the event of a disease outbreak or potential outbreak in a waterfowl population.

Most requests for WS' assistance are associated with resident Canada geese (USDA 1999) along with waterfowl that congregate during migration periods and during nesting periods. Those requests for

assistance are often associated with fecal accumulations in public-use areas, damage to agricultural resources, hazards posed to aircraft from bird strikes, and damage occurring to property.

### **III. SCOPE OF ANALYSES IN THE EA**

The EA evaluates waterfowl damage management under three alternatives to reduce threats to human safety and to resolve damage to property, natural resources, and agricultural resources wherever such management is requested by a cooperator. The analyses in the EA are intended to apply to any action taken by WS to alleviate damage or threats of damage associated with waterfowl that may occur in any locale and at any time within the Commonwealth of Virginia. The EA emphasizes major issues as they relate to specific areas; however, the issues addressed apply wherever waterfowl damage and the resulting damage management activities would occur. The standard WS Decision Model (Slate et al. 1992, USDA 1997, USDA 2010) would be the site-specific procedure for individual actions conducted by WS in the Commonwealth.

The United States Fish and Wildlife Service (USFWS) has jurisdiction over the management of migratory birds and has specialized expertise in identifying and quantifying potential adverse effects to the human environment from waterfowl damage management activities. The USFWS was a cooperating agency with WS in developing the EA to analyze cumulative take of waterfowl and to ensure compliance with the National Environmental Policy Act (NEPA). Native migratory bird species are afforded protection from take by the Migratory Bird Treaty Act (MBTA); however, take can occur when deemed appropriate to the Act and a depredation permit has been issued by the USFWS or through the establishment of depredation orders which allow birds to be taken without the need for a depredation permit when the criteria of the order has been met. Therefore, any take involved with the alternatives would only occur when a depredation permit has been issued by the USFWS and only at levels permitted or pursuant to existing depredation orders. The analyses in the EA would ensure the USFWS compliance with the NEPA for the issuance of depredation permits for the take of waterfowl in the Commonwealth when required.

The EA was made available to the public for review and comment by a legal notice published in *The Richmond Times Dispatch*, *The Virginian-Pilot*, and *The Roanoke Times* newspapers from December 27, 2010 through December 29, 2010. A notice of availability and the EA were also made available for public review and comment on the APHIS website at [http://www.aphis.usda.gov/wildlife\\_damage/nepa.shtml](http://www.aphis.usda.gov/wildlife_damage/nepa.shtml) beginning on December 20, 2010. A letter of availability was also mailed directly to agencies, organizations, and individuals with probable interest in waterfowl damage management in the Commonwealth. The public involvement process ended on January 28, 2011. WS received two comment letters during the public comment period. WS' responses to comments are presented in Appendix A of this Decision.

### **IV. RELATIONSHIP OF THE EA TO OTHER ENVIRONMENTAL DOCUMENTS**

The relationship of the EA to other documents that address waterfowl management were also discussed in the EA including WS' programmatic Final Environmental Impact Statement (FEIS) (USDA 1997), the FEIS developed by the USFWS in cooperation with WS on the management of resident Canada goose populations (USFWS 2005), the light goose management FEIS developed by the USFWS (USFWS 2007), the mute swan management plan for the Atlantic Flyway (Atlantic Flyway Council 2003), and a previous EA developed by WS to address waterfowl damage in the Commonwealth (USDA 1999).

## **V. DECISIONS TO BE MADE**

Based on the scope of the EA, the decisions to be made are: 1) should WS conduct waterfowl damage management to alleviate damage to agriculture, property, natural resources, and threats to human safety, 2) should the Migratory Bird Program in USFWS Region 5 issue depredation permits to WS and other entities to conduct waterfowl damage management activities, 3) should WS conduct disease surveillance and monitoring in the waterfowl population when requested by the Virginia Department of Game and Inland Fisheries (VDGIF), the USFWS, and other agencies, 4) should WS implement an integrated wildlife damage management strategy, including technical assistance and direct operational assistance, to meet the need for waterfowl damage management in Virginia, 5) if not, should WS attempt to implement one of the alternatives to an integrated damage management strategy as described in the EA, and 6) would the proposed action or the other alternatives result in adverse impacts to the environment requiring the preparation of an EIS.

## **VI. AUTHORITY AND COMPLIANCE**

WS is authorized by law to reduce damage caused by wildlife through the Act of March 2, 1931 (46 Stat. 1468; 7 U.S.C. 426-426b), as amended and the Act of December 22, 1987 (101 Stat. 1329-331, 7 U.S.C. 426c). Management of native migratory birds is the responsibility of the USFWS under the MBTA. As the authority for the management of migratory birds, the USFWS was a cooperating agency during the development of the EA and provided input to ensure an interdisciplinary approach according to the NEPA and agency mandates, policies, and regulations. The VDGIF is responsible for managing wildlife in the Commonwealth of Virginia, including waterfowl. Information from the USFWS and the VDGIF has been provided to WS to assist in the analysis of potential impacts of WS' proposed activities on waterfowl populations in the Commonwealth.

The EA and this Decision ensures WS' actions comply with the NEPA, with the Council on Environmental Quality guidelines (40 CFR 1500), and with APHIS' NEPA implementing regulations (7 CFR 372). All waterfowl damage management activities, including disposal requirements, would be conducted consistent with: 1) the Endangered Species Act of 1973, 2) the MBTA, 3) the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), 4) applicable Executive Orders, and 5) applicable federal, Commonwealth, and local laws, regulations and policies, including WS' Directives. In addition, WS has received a determination that the proposed action alternative would be consistent with the Virginia Coastal Zone Management Plan in accordance with the Coastal Zone Management Act of 1972, as amended (16 USC 1451-1464, Chapter 33; P.L. 92-583, October 27, 1972; 86 Stat. 1280).

## **VII. AFFECTED ENVIRONMENT**

Most species of waterfowl addressed in the EA can be found throughout the year across the Commonwealth where suitable habitat exists for foraging, loafing, roosting, and breeding. Waterfowl are capable of utilizing a variety of habitats in the Commonwealth but generally use areas adjacent to or near bodies of water. Nesting habitat could include areas around wetlands, ponds, meadows, gravel bars along rivers, islands, agricultural fields, along irrigation ditches, reservoirs, sewage lagoons, city lakes, golf courses, subdivisions, highway medians, and on top of city buildings. Waterfowl are also known to loaf, roost, and forage in similar habitat near water bodies preferring areas that are open with short vegetation which allows waterfowl to detect approaching predators. During the migration periods, waterfowl often roost on or near bodies of water but are known to travel to other areas to forage, such as agricultural fields. Since waterfowl can be found throughout the Commonwealth, requests for assistance to manage damage or threats of damage could occur in areas occupied by waterfowl.

## **VIII. ISSUES ADDRESSED IN THE ANALYSIS OF ALTERNATIVES**

Issues related to wildlife damage management were initially identified and defined during the development of WS' programmatic FEIS (USDA 1997). Issues related to waterfowl damage management in the Commonwealth were defined and preliminary alternatives were identified through consultation with the USFWS and with the VDGIF. The EA was also made available to the public for review and comment through notices published in local media and through direct notification of interested parties.

Chapter 2 of the EA describes in detail the issues considered and evaluated in the EA (USDA 2010). The following issues were identified as important to the scope of the analysis (40 CFR 1508.25) with each alternative evaluated in the EA relative to the impacts on the major issues:

- Issue 1 - Effects on Target Waterfowl Populations
- Issue 2 - Effects on Non-target Wildlife Species Populations, Including Threatened and Endangered (T&E) Species
- Issue 3 - Effects on the Aesthetic Values of Target Waterfowl
- Issue 4 - Humaneness and Animal Welfare Concerns of Methods
- Issue 5 - Effectiveness of Damage Management Methods
- Issue 6 - Effects of Management Methods on Human Health and Safety
- Issue 7 - Effects on the Regulated Harvest of Waterfowl

## **IX. ISSUES CONSIDERED BUT NOT ANALYZED IN DETAIL WITH RATIONALE**

In addition to those issues analyzed in detail, several issues were identified during the development of the EA but were not considered in detail. The rationale for the decision not to analyze those issues in detail is discussed in the EA. Those issues not analyzed in detail were:

- Appropriateness of Preparing an EA For Such a Large Area
- A Loss Threshold Should Be Established Before Allowing Lethal Methods
- Waterfowl Damage Management Should Not Occur at Taxpayer Expense
- Cost Effectiveness of Management Methods
- Effects on Human Health from Consumption of Waterfowl
- WS' Impact on Biodiversity
- Impacts of Avian Influenza on Bird Populations
- Bird Damage Should Be Managed By Private Nuisance Wildlife Control Agents
- Effects from the Use of Lead Ammunition in Firearms
- Impacts of Dispersing Waterfowl on People in Urban/Suburban Areas
- Site-specific Analysis Should be Made for Every Location Where Bird Damage Management Could Occur

## **X. DESCRIPTION OF THE ALTERNATIVES**

The following three alternatives were developed to respond to the issues identified in Chapter 2 of the EA and to address the need for action discussed in Chapter 1 (USDA 2010). Chapter 4 in the EA analyzes the environmental consequences of each alternative in comparison to determine the extent of actual or potential impacts on the issues. Below is a summary of the alternatives analyzed in detail.

### ***Alternative 1 – No Involvement by WS in Waterfowl Damage Management in the Commonwealth***

Under the no involvement alternative, WS would not be involved with any aspect of waterfowl damage management activities in Virginia. All requests for assistance received by WS would be referred to the USFWS, the VDGIF, and/or other entities. The take of waterfowl could continue to occur under this alternative when damage or threats were occurring in accordance with depredation permits issued by the USFWS as well as under the depredation orders and during the regulated hunting season in the Commonwealth. Most of the methods described in Appendix B of the EA under this alternative to alleviate waterfowl damage and threats would be available under any of the alternatives and would be available to all entities (USDA 2010).

### ***Alternative 2 - Addressing Waterfowl Damage by WS through Technical Assistance Only***

Under the technical assistance only alternative, WS would address every request for assistance with technical assistance only. Technical assistance would provide those persons seeking assistance with information and recommendations on waterfowl damage management that those cooperators could employ without WS' direct involvement in the action. Technical assistance could be employed through personal or telephone consultations and through site visits. Under this alternative, the immediate burden of resolving threats or damage associated with waterfowl would be placed on those persons experiencing damage. Those persons could employ those methods recommended by WS, could employ other methods, or could take no further action. Only those methods legally available for use by the appropriate individual would be recommend or loaned by WS. WS would continue to recommend an integrated approach using lethal and non-lethal methods using those methods available. Similar to Alternative 1, most methods described in Appendix B of the EA would be available to those persons experiencing damage or threats associated with waterfowl.

Those persons experiencing damage or concerned with threats posed by waterfowl could seek assistance from other governmental agencies, private entities, or conduct damage management on their own. Those entities could implement a waterfowl damage management program using those methods legally available or could take no action. In order for a property owner or manager to use lethal methods, they must apply for their own depredation permit to take waterfowl from the USFWS or take waterfowl according to existing depredation orders. Under this alternative, WS could evaluate the damage and complete a Migratory Bird Damage Report which would include information on the extent of the damages, the number of waterfowl present, and a recommendation for the number of waterfowl that could be taken to best alleviate the damages. Following USFWS review of a complete application for a depredation permit from a property owner or manager and the Migratory Bird Damage Report, a depredation permit could be issued to authorize the lethal take of a specified number of waterfowl.

### ***Alternative 3 - Continuing the Current Integrated Approach to Managing Waterfowl Damage (Proposed Action/No Action)***

The proposed action/no action alternative would continue the current implementation of an adaptive integrated approach utilizing non-lethal and lethal techniques, as deemed appropriate using the WS Decision Model, to reduce damage and threats caused by waterfowl in the Commonwealth. A major goal of the program would be to resolve and prevent waterfowl damages and to reduce threats to human safety. To meet this goal, WS would continue to respond to requests for assistance with, at a minimum, technical assistance, or when funding is available, operational damage management. Funding could occur through federal appropriations or from cooperative funding. Currently, direct operational assistance provided by WS in the Commonwealth is conducted through cooperative funding.

All methods addressed in Appendix B of the EA could be employed by WS to resolve requests for assistance to manage damage associated with waterfowl in the Commonwealth. Using the WS Decision model discussed in the EA, WS would employ methods singularly or in combination in an integrated approach to alleviate damage caused by waterfowl.

## **XI. ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL WITH RATIONALE**

Additional alternatives were also evaluated but were not considered in detail in the EA with rationale provided (USDA 2010). The alternatives that were analyzed in the EA but not in detail include:

- Use of Non-lethal Methods before Lethal Methods
- Use of Lethal Methods Only
- Use of Non-lethal Methods Only
- Trap and Translocate Waterfowl Only
- Reducing Damage by Managing Waterfowl Populations through the Use of Reproductive Inhibitors
- Compensation for Bird Damage

## **XII. STANDARD OPERATING PROCEDURES**

The WS program in Virginia uses many standard operating procedures and conducts work pursuant to WS' Directives. Standard operating procedures are discussed in detail in Chapter 5 of WS' programmatic FEIS (USDA 1997) and in Chapter 3 of the EA (USDA 2010). Those standard operating procedures would be incorporated into activities conducted by WS when addressing waterfowl damage and threats in the Commonwealth under the proposed action alternative (Alternative 3) and when applicable, under the technical assistance alternative (Alternative 2). If the no involvement by WS alternative (Alternative 1) is selected, the lack of assistance by WS would preclude the employment or recommendation of those standard operating procedures addressed in the EA.

## **XIII. ENVIRONMENTAL CONSEQUENCES FOR ISSUES ANALYZED IN DETAIL**

The EA analyzes the environmental consequences of each alternative as each alternative relates to the issues identified to provide information needed for making informed decisions in selecting the appropriate alternative to address the need for action. The following resource values in Virginia are not expected to be significantly impacted by any of the alternatives analyzed in the EA: soils, geology, minerals, water quality/quantity, flood plains, wetlands, critical habitats (areas listed in threatened and endangered species recovery plans), visual resources, air quality, prime and unique farmlands, aquatic resources, timber, and range. The activities proposed in the alternatives would have a negligible effect on atmospheric conditions including the global climate. Meaningful direct or indirect emissions of greenhouse gases would not occur as a result of any of the alternatives. Those alternatives would meet the requirements of applicable laws, regulations, and Executive Orders, including the Clean Air Act and Executive Order 13514.

Chapter 4 of the EA analyzes the environmental consequences of each alternative to determine the extent of actual or potential impacts on those major issues identified in the EA. The proposed action/no action alternative serves as the baseline for the analysis and the comparison of expected impacts among the alternatives. The analysis also takes into consideration mandates, directives, and the procedures of WS, the USFWS, and the VDGIF. The analyses in Chapter 4 of the EA indicate the potential impacts to the quality of the human environment would be similar across the alternatives.

## **Issue 1 - Effects on Target Waterfowl Populations**

Under the proposed action, WS would incorporate non-lethal and lethal methods described in Appendix B of the EA in an integrated approach in which all or a combination of methods could be employed to resolve a request for assistance. WS would recommend and operational employ both non-lethal and lethal methods, as governed by federal, Commonwealth, and local laws and regulations under the proposed action. The appropriateness of methods and techniques would be applied based on the WS Decision Model using inputs from each request for assistance.

Non-lethal methods can disperse or otherwise make an area unattractive to waterfowl that are causing damage which could reduce the presence of those waterfowl at the site and potentially the immediate area around the site where non-lethal methods are employed. Non-lethal methods would be given priority when addressing requests for assistance (WS Directive 2.101). However, non-lethal methods would not necessarily be employed to resolve every request for assistance if deemed inappropriate by WS' personnel using the WS Decision Model, especially in situations where the requesting entity has already attempted to resolve the damage or threats of damage using non-lethal methods. Non-lethal methods are used to exclude, harass, and disperse target wildlife from areas where damage or threats are occurring. When effective, non-lethal methods would disperse waterfowl from the area resulting in a reduction in the presence of those waterfowl at the site where those methods were employed. From FY 2004 through FY 2009, WS employed non-lethal methods to harass and disperse waterfowl in the Commonwealth as part of an integrated approach to managing damage and threats. Non-lethal methods are generally regarded as having minimal impacts on overall populations of wildlife since those species are unharmed. The continued use of non-lethal methods often leads to the habituation of birds to those methods, which can decrease their effectiveness. Lethal methods are often employed to reinforce non-lethal methods and to remove waterfowl that have been identified as causing damage or posing a threat to human safety. The use of lethal methods would result in local reductions of waterfowl in the areas where damage or threats were occurring. The number of waterfowl removed from the population using lethal methods would be dependent on the number of requests for assistance received, the number of waterfowl involved with the associated damage or threat, and the efficacy of methods employed.

Waterfowl that could be lethally taken by WS under the proposed action could be taken by those persons experiencing damage or threats in the absence of WS' direct involvement under the other alternatives since the take of waterfowl can occur when a depredation permit has been issued by the USFWS pursuant to the MBTA. In addition, waterfowl could be lethally taken to alleviate damage or reduce threats under depredation orders and/or during the regulated hunting seasons in the Commonwealth. For those waterfowl species afforded no protection under the MBTA, lethal take can occur without a need for a depredation permit. Since the lack of WS' direct involvement does not preclude the taking of waterfowl by those persons experiencing damage or threats, WS' involvement in the taking of those waterfowl under the proposed action would not be additive to the number of waterfowl that could be taken by other entities in the absence of WS' involvement. As was shown in the EA, the waterfowl species addressed in the EA have been lethally taken by other entities in the Commonwealth to alleviate damage or threats of damage. The number of waterfowl taken annually would likely be similar across the alternatives, since the take of waterfowl could occur even if WS was not directly involved with providing assistance under Alternative 1 and Alternative 2. Those activities proposed, including the proposed take of waterfowl, under Alternative 3 would not be additive to the number of waterfowl that could be taken by other entities under the other alternatives despite the lack of WS' direct involvement.

In addition, most non-lethal and lethal methods available for resolving damage or threats associated with waterfowl would be available under any of the alternatives. Therefore, WS' use of those methods available under all of the alternatives would not be additive to the environmental status quo since most of those methods could be employed by any entity experiencing damage or threats caused by waterfowl.

Based on those quantitative and qualitative parameters addressed in the EA, the proposed take levels of waterfowl species addressed under the proposed action alternative (Alternative 3) would be considered of low magnitude when compared to population trend data, population estimates, and/or harvest data. The number of waterfowl lethally that could be taken annually under the alternatives is likely to be similar since the take of waterfowl could occur despite no involvement by WS. As was shown in the EA, other entities have addressed waterfowl species to alleviate damage; therefore, any waterfowl that could be lethally taken under the proposed action alternative could be taken by other entities under the other alternatives. WS does not have the authority to regulate the number of waterfowl taken annually by other entities. WS' take of waterfowl would only occur at levels authorized and only when permitted by the USFWS for those species for which a depredation permit is required for take.

Based on the levels of take that have occurred previously by WS and other entities and in anticipation of the USFWS permitting the take of waterfowl at levels addressed in the EA, the cumulative take levels addressed are also of low magnitude when compared to those quantitative and qualitative parameters addressed in the EA. The permitting of take by the USFWS ensures that cumulative take levels occur within allowable levels to maintain species' populations and meet population objectives for each species.

## **Issue 2 - Effects on Non-target Wildlife Species Populations, Including T&E Species**

Another issue often raised is the potential impacts to populations of wildlife that could be taken as non-targets during damage management activities. While every effort is made to minimize the risks of lethally taking non-target wildlife, the potential does exist for the unintentional take of non-targets during damage management activities. Since FY 2004, no non-targets are known to have been killed by WS during previous waterfowl damage management activities using an integrated approach. Methods available to address waterfowl damage would be similar across all the alternatives. Therefore, risks to non-targets from the use of those methods would be similar across the alternatives analyzed in detail when those methods are used as intended. Most methods discussed in Appendix B that are available for use to manage waterfowl damage would be available to all entities under all of the alternatives. Although some risks to non-targets do occur from the use of those methods, those risks are minimal when those methods are used by trained personnel in accordance with WS Directive 2.430 and use guidelines.

Under the no involvement by WS alternative, WS would not be directly involved with any aspect of waterfowl damage management; therefore, no direct impacts to non-targets would occur from WS. Under the technical assistance only alternative, WS could provide information on the proper use of methods and provide demonstration on the use of methods but would not be directly involved with using methods to alleviate waterfowl damage or threats. Similar to the no WS involvement alternative, under the technical assistance alternative, if methods are applied as intended and with regard for non-target hazards, those methods would not result in the decline in non-target species' populations. If requestors are provided technical assistance but do not implement any of the recommended actions and take no further action, the potential impacts to non-targets would be lower compared to the proposed action. If those persons requesting assistance implement recommended methods appropriately and as instructed or demonstrated, the potential impacts to non-targets would be similar to the proposed action. Methods or techniques not implemented as recommended or used inappropriately would likely increase risks to non-targets. When employing direct operational assistance under the proposed action alternative, WS could employ methods and use techniques which would avoid non-target take as described in Chapter 3 of the EA under the standard operating procedures and those measures and procedures discussed in WS' programmatic FEIS (USDA 1997).

The ability to reduce damage and threats caused by waterfowl would be variable based upon the skills and abilities of the person implementing damage management actions under Alternative 1 and Alternative 2.

If those methods available are applied as intended, risks to non-targets would be minimal to non-existent. If methods available are applied incorrectly or applied without knowledge of waterfowl behavior, risks to non-target wildlife would be higher under any of the alternatives. If frustration from the lack of available assistance under Alternative 1 and Alternative 2 causes those persons experiencing waterfowl damage to use methods that are not legally available for use, risks to non-targets would be higher under those alternatives. People have resorted to the use of illegal methods to resolve wildlife damage that have resulted in the lethal take of non-target wildlife (USDA 1997, White et al. 1989, USFWS 2001, Food and Drug Administration 2003). Under the proposed action alternative, those persons could request direct operational assistance from WS to reduce damage and threats occurring, which increases the likelihood that non-target species would be unaffected by damage management activities.

Based on a review of those T&E species listed in the Commonwealth during the development of the EA (see Appendix C in the EA), WS determined that activities conducted pursuant to the proposed action would not likely adversely affect those species listed in the Commonwealth by the USFWS and the National Marine Fisheries Service, nor their critical habitats. In addition, based on a review of the proposed action and the methods available under the proposed action, WS has determined that the proposed waterfowl damage management program would not adversely affect any of the species listed in the Commonwealth by the VDGIF.

### **Issue 3 - Effects on the Aesthetic Values of Target Waterfowl**

Waterfowl often provide aesthetic enjoyment to many people in the Commonwealth through observations, photographing, and knowing they exist as part of the natural environment. Under all the alternatives, methods available that could be employed are intended to make resources unavailable or unattractive, or to remove those waterfowl causing damage. Management actions often result in the removal of waterfowl from the area where damage is occurring or in the dispersal of waterfowl from an area. Since methods available are similar across the alternatives, the use of those methods would have similar potential impacts on the aesthetics of waterfowl. However, even under the proposed action alternative, the dispersal and/or take of waterfowl under the alternatives would not reach a magnitude that would prevent the ability to view waterfowl outside of the area where damage was occurring. The effects on the aesthetic values of waterfowl would therefore be similar across the alternatives and would be minimal.

### **Issue 4 - Humaneness and Animal Welfare Concerns of Methods**

The issue of humaneness was also analyzed in detail in relationship to the alternatives. Since many methods addressed in Appendix B of the EA are available under all the alternatives, the issue of method humaneness would be similar for those methods across all the alternatives. The ability of WS to provide direct operational assistance under the proposed action alternative would ensure methods are employed by WS as humanely as possible. Under the other alternatives, methods could be used inhumanely if used inappropriately or without consideration of waterfowl behavior. However, most methods, when used as intended, would be considered humane and when applied appropriately, would not increase distress of waterfowl.

### **Issue 5 - Effectiveness of Damage Management Methods**

The methods available to those persons experiencing damage would be similar across the alternatives analyzed in detail. Since most of those methods available for resolving waterfowl damage would be available to those persons experiencing damage or threats under all the alternatives, the effectiveness of those methods when used as intended would be similar among the alternatives. A common issue raised is that the use of lethal methods is ineffective because additional waterfowl are likely to return to the area,

either after removal occurs or the following year when waterfowl return to the area, which gives the impression of creating a financial incentive to continue the use of only lethal methods. This argument assumes waterfowl only return to an area where damage was occurring if lethal methods are used. However, the effects of non-lethal methods are also often temporary, which could result in waterfowl returning to an area where damage was occurring once those methods are no longer used. The common factor when employing any method is that waterfowl would return if suitable habitat continues to exist at the location where damage was occurring and waterfowl densities are sufficient to occupy all available habitats.

Dispersing waterfowl using pyrotechnics, repellents, trained dogs, or any other non-lethal methods often requires repeated application to discourage waterfowl which increases costs, moves waterfowl to other areas where they could cause damage, and are temporary if habitat conditions remain unchanged. Dispersal and translocation of waterfowl could be viewed as moving a problem from one area to another which would require addressing damage caused by those waterfowl species at another location. WS' recommendation of, or use of techniques to modify existing habitat or to make areas unattractive to waterfowl is discussed in Appendix B of the EA. WS' objective under the proposed action/no action alternative would be to respond to requests for assistance with the most effective methods and to provide for the long-term solution to the problem using WS' Decision Model to adapt methods in an integrated approach to managing waterfowl damage that is agreed upon by the cooperator.

As part of an integrated approach to managing waterfowl damage, WS would have the ability to adapt methods to damage situations to effectively reduce or prevent damage from occurring. Under the proposed integrated approach, all methods, individually or in combination, could be employed as deemed appropriate through WS' Decision Model to address requests for assistance. Once employed, methods would be further evaluated for effectiveness based on a continuous evaluation of activities by WS. Therefore, the effectiveness of methods would be considered as part of the decision process for each damage management request based on continual evaluation of methods and results.

Similarly, under the technical assistance only alternative (Alternative 2), WS would recommend an integrated approach to resolving damage and threats using those methods deemed appropriate using the WS Decision Model that would be legally available for use by the person requesting assistance. Under the no involvement by WS alternative (Alternative 1), WS would not be involved with any aspect of waterfowl damage management and all requests for assistance received by WS would be referred to other entities (e.g., VDGIF, USFWS).

## **Issue 6 - Effects of Management Methods on Human Health and Safety**

The threats to human safety of methods available would be similar across the alternatives since those methods would be available across the alternatives. However, the expertise of WS' employees in using those methods available likely would reduce threats to human safety since WS' employees are trained and knowledgeable in the use of those methods. If methods are used incorrectly or without regard for human safety, risks to human safety would increase under any of the alternatives that those methods could be employed. The EA determined that the availability of alpha chloralose under the proposed action would not increase risks to human safety from the use of the method (USDA 2010). Although risks do occur from the use of alpha chloralose, when used in consideration of human safety, the use does not pose additional risks to human safety beyond those associated with the use of other methods.

## **Issue 7 - Effects on the Regulated Harvests of Waterfowl**

Hunting seasons in the Commonwealth exist for many of the waterfowl species addressed in the EA. The only species addressed in the EA that do not have hunting seasons within the Commonwealth are mute

swans, feral domestic waterfowl, Muscovy ducks, and pied-billed grebes. WS would have no impact on regulated hunting under Alternative 1 since WS would not be involved with any aspect of waterfowl damage management. Similarly, WS would have no impact on regulated hunting under Alternative 2 since WS would not lethally remove waterfowl under the alternative. However, resource/property owners may remove waterfowl under depredation permits, when required, and depredation orders issued by the USFWS resulting in impacts similar to the proposed action and Alternative 1. The recommendation of non-lethal methods could disperse or exclude waterfowl from areas under this alternative which could limit the ability of those persons interested to harvest those species in the damage management area. However, waterfowl populations would be unaffected by WS under the technical assistance alternative (Alternative 2).

The USFWS and the VDGIF could continue to regulate waterfowl populations through adjustments in allowed take during the regulated harvest season and through depredation orders or permits to manage damage or threats of damage. The magnitude of lethal take addressed in the proposed action would be low when compared to the mortality of waterfowl from all known sources. When WS' proposed take of waterfowl was included as part of the known mortality of those species from other sources and compared to the known populations of those species, the impact on populations was below the level of removal required to lower population levels. The USFWS and the VDGIF would determine the number of waterfowl taken annually by WS through the issuance of depredation permits.

Waterfowl damage management activities conducted by WS would occur after consultation with the USFWS and the VDGIF. With oversight by the USFWS and the VDGIF, the number of waterfowl allowed to be taken by WS would not limit the ability of those persons interested to harvest waterfowl during the regulated season. All take by WS would be reported to the USFWS annually to ensure take by WS is incorporated into population management objectives established for waterfowl populations. Based on the limited take proposed by WS and the oversight by the USFWS and the VDGIF, WS' take annually would have no effect on the ability of those interested to harvest waterfowl during the regulated harvest season.

#### **XIV. CUMULATIVE IMPACTS OF THE PROPOSED ACTION**

No significant cumulative environmental impacts are expected from any of the three alternatives, including the proposed action. Under the proposed action, the lethal removal of waterfowl by WS would not have significant impacts on statewide waterfowl populations when known sources of mortality are considered. No risk to public safety is expected when activities are provided and expected by requesting individuals in Alternative 2 and Alternative 3, since only trained and experienced personnel would conduct and/or recommend damage management activities. There is a slight increased risk to public safety when persons who reject assistance and recommendations conduct their own activities under Alternative 2, and when no assistance is provided under Alternative 1. However, under all of the alternatives, those risks would not be to the point that the impacts would be significant. The analysis in this EA indicates that an integrated approach to managing damage and threats caused by waterfowl would not result in significant cumulative adverse impacts on the quality of the human environment.

#### **XV. DECISION AND RATIONALE**

Based on the analyses of the alternatives developed to address those issues in the EA, including individual and cumulative impacts of those alternatives, the following decision has been reached:

## ***Decision***

I have carefully reviewed the EA prepared to meet the need for action. I find the proposed action alternative (Alternative 3) to be environmentally acceptable, addressing the issues and needs while balancing the environmental concerns of management agencies, landowners, advocacy groups, and the public. The analyses in the EA adequately address the identified issues which reasonably confirm that no significant impact, individually or cumulatively, to wildlife populations or the quality of the human environment are likely to occur from the proposed action, nor does the proposed action constitute a major federal action. Therefore, the analysis in the EA does not warrant the completion of an EIS.

Based on the analyses in the EA, the issues identified are best addressed by selecting Alternative 3 (proposed action/no action) and applying the associated standard operating procedures discussed in Chapter 3 of the EA. Alternative 3 successfully addresses (1) waterfowl damage management using a combination of the most effective methods and does not adversely impact the environment, property, human health and safety, and/or non-target species, including T&E species; (2) it offers the greatest chance of maximizing effectiveness and benefits to resource owners and managers while minimizing cumulative impacts on the quality of the human environment that might result from the program's effect on target and non-target species populations; (3) it presents the greatest chance of maximizing net benefits while minimizing adverse impacts to public health and safety; and (4) it offers a balanced approach to the issues of humaneness and aesthetics when all facets of those issues are considered. Further analysis would be triggered if changes occur that broaden the scope of waterfowl damage management activities in the Commonwealth, that affect the natural or human environment, or from the issuance of new environmental regulations. Therefore, it is my decision to implement the proposed action/no action alternative (Alternative 3) as described in the EA.

## ***Finding of No Significant Impact***

Based on the analyses provided in the EA, there are no indications that the proposed action (Alternative 3) would have a significant impact, individually or cumulatively, on the quality of the human environment. I agree with this conclusion and therefore, find that an EIS should not be prepared. This determination is based on the following factors:

1. Waterfowl damage management as conducted by WS in the Commonwealth is not regional or national in scope.
2. The proposed action would pose minimal risk to public health and safety. Risks to the public from many of the methods described in the EA were determined to be low in a formal risk assessment (USDA 1997). Based on the analyses in the EA, the methods available would not adversely affect human safety based on their use patterns.
3. There are no unique characteristics such as park lands, prime farm lands, wetlands, wild and scenic areas, or ecologically critical areas that would be significantly affected. WS' standard operating procedures and adherence to applicable laws and regulations would further ensure that WS' activities do not harm the environment.
4. The effects on the quality of the human environment are not highly controversial. Although there is some opposition to waterfowl damage management, this action is not highly controversial in terms of size, nature, or effect.
5. Based on the analysis documented in the EA and the accompanying administrative file, the effects of the proposed damage management program on the human environment would not be

significant. The effects of the proposed activities are not highly uncertain and do not involve unique or unknown risks.

6. The proposed action would not establish a precedent for any future action with significant effects.
7. No significant cumulative effects were identified by this assessment or other actions implemented or planned within the area.
8. The proposed activities would not affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, nor would they likely cause any loss or destruction of significant scientific, cultural, or historical resources.
9. WS has determined that the proposed program would not adversely affect any federally listed T&E species currently listed in the Commonwealth and the USFWS has concurred with WS' determination. In addition, WS has determined that the proposed activities would not adversely affect Commonwealth-listed species.
10. The proposed action would be in compliance with all applicable federal, Commonwealth, and local laws.

### ***Rationale***

The rationale for this decision is based on several considerations. This decision takes into account public comments, social/political and economic concerns, public health and safety, and the best available science. The foremost considerations are that: 1) waterfowl damage management would only be conducted by WS at the request of landowners/managers, 2) management actions are consistent with applicable laws, regulations, policies and orders, and 3) no adverse impacts to the environment were identified in the analysis. As a part of this Decision, the WS program in Virginia would continue to provide effective and practical technical assistance and direct management techniques that reduce damage and threats of damage.



Charles S. Brown, Director-Eastern Region  
USDA/APHIS/WS  
Raleigh, North Carolina

3/28/11

Date

### **XVI. LITERATURE CITED**

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## **Appendix A**

### **RESPONSES TO COMMENTS ON THE ENVIRONMENTAL ASSESSMENT: MANAGING WATERFOWL DAMAGE IN THE COMMONWEALTH OF VIRGINIA**

#### **Comment 1 – Period for which the EA would remain valid**

One commenter posed a question regarding WS' consideration of an end date for the EA instead of the EA remaining valid until WS determines that new circumstances have been identified that would require further review of the analyses in the EA. The EA specifically addressed the period for which the EA would remain valid, if an EIS was not warranted, in Section 1.3 of the EA. As identified in that section, the EA would remain valid until a new need for action, changed conditions, or new alternatives having different environmental impacts are identified by WS. WS did not consider an end date for the EA since WS would annually review the scope of the EA to ensure activities conducted under the selected alternative remain within the potential impact parameters analyzed in the EA. Annual monitoring of activities ensures the EA remains appropriate to the scope of waterfowl damage management activities conducted by WS in Virginia.

#### **Comment 2 – Minimize potential impacts to breeding pairs of waterfowl**

The commenter specifically identified the breeding populations of gadwall, blue-winged teal, American coot, and the pied-billed grebe in the Commonwealth which have been assigned State ranks by the Virginia Department of Conservation and Recreation indicating the breeding populations of those species occur infrequently, irregularly, or rarely occur within the Commonwealth. However, those species are not considered as threatened, endangered, or species of special concern under the Endangered Species Act or the Virginia Endangered Species Act (Code of Virginia Section 29.1-564 through 570). The commenter recommended WS only conduct activities involving those species in the Commonwealth during the non-breeding season. Except for the pied-billed grebe, those species (gadwall, blue-winged teal, and American coots) can all be harvested during the annual hunting season which occurs during the fall migration period.

Requests for assistance associated with those species are most often associated with airports where those species pose a strike risk with aircrafts. Although single individuals of those species can pose strike risks at airports, those species are most often addressed during the spring and fall migration periods when the flocking behavior of the species greatly increases the strike risks to aircraft when those species occur on or near airport property. Although pied-billed grebes are not typically associated with flocking behavior, grebes occur more frequently during the migration periods, which increases strike risks when those birds occur on or near airport properties. As was stated in Chapter 4 of the EA, those species would not be taken at any level that would adversely affect populations including breeding populations in the Commonwealth. All take would occur pursuant to depredation permits issued by the USFWS and only at levels permitted. If individuals of those species pose a strike risk to aircraft during the breeding season, WS could be requested to reduce those strike risks on or near airport property. In those situations, take would be limited to a single individual or a few individuals of the breeding population. However, take during the breeding season would not reach a level that would result in a change in the status of those species within the Commonwealth.

#### **Comment 3 – Continue to coordinate activities with the VDGIF and the USFWS**

The commenter recommended WS continue to coordinate activities with the USFWS and the VDGIF in regards to evaluating the potential effects associated with the alternatives. The USFWS is a cooperating agency on the EA to analyze cumulative take of those bird species addressed in this EA. The USFWS has

jurisdiction over the management of migratory birds and has specialized expertise in identifying and quantifying potential adverse affects to the human environment from bird damage management activities. The VDGIF is the agency responsible for managing wildlife in the Commonwealth of Virginia, including waterfowl.

The EA analyzed the potential effects of conducting alternative approaches to addressing waterfowl damage, as coordinated with the USFWS and the VDGIF, along with other governmental agencies, and private entities, as appropriate, in the Commonwealth under Memorandum of Understanding, cooperative service agreement, or other comparable document. WS would continue to ensure activities are coordinated with appropriate federal, Commonwealth, and local entities to ensure that activities conducted under the selected alternative occur within the parameters addressed in the EA.